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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/567,563

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Thomas Heberlein

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EXAMINER

CAVALLARI, DANIEL J

ART UNIT

PAPER NUMBER

2836

MAIL DATE

DELIVERY MODE

01/13/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/567,563	Applicant(s) HEBERLEIN, THOMAS	
	Examiner DANIEL CAVALLARI	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 8-10 and 20 is/are allowed.
- 6) ☒ Claim(s) 11-15, 17-19 and 21-25 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/24/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

The Examiner acknowledges the amendments submitted 9/24/2008. The amendments to claim(s) 1, 9, 11, and 23 are accepted.

Information Disclosure Statement

The information disclosure statement(s) filed 9/24/2008 has been considered.

Response to Arguments

Applicant's arguments in regard to the objection to the drawings and objection to the specification are persuasive. The previous made objections have been withdrawn.

Applicant's arguments with respect to claims 11-25 have been considered but are moot in view of the new ground(s) of rejection as necessitated by applicant's amendment.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 11-15 and 17-25 are rejected under 35 U.S.C. 102(a) as being anticipated by Lazzaro (US 2002/0195883).

In regard to claim 11

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A method for safety-related switching of an electrical unit, the method comprising: receiving a switch-off signal (read on by the signal produced by "E-STOP" switch, see figure 4); switching the electrical unit off (see paragraph 51); receiving a switch-on signal in the form of a switch-on pulse (from "START" switch, figure 2); and switching the electrical unit on (see paragraph 55), the electrical unit being switchable on for a predeterminable period of time after reception of the switch-on pulse (see paragraph 75 wherein Lazzaro teaches "but when the start switch contacts stick, the motor will be shut down within one cycle due to contact K5 within a safety relay loop remaining open, due to prolonged energization of coil k5"): and providing an acknowledgement command for maintaining an on state of the electrical unit for a predetermined time after the switch-on pulse is received (read on by the signal to motor source contactors MC1 and MC2, see paragraph 55) .

In regard to claim 12

The method as claimed in claim 11, wherein the switch-on signal originates from an on pushbutton (see paragraph 55).

In regard to claims 13 and 21

Wherein the switch-off signal originates from a latchable emergency-stop pushbutton (see paragraph 51 "a latching mechanism 52 for manual resetting, in accordance with ANSI 4.6.3 and Europe Machine Standard EN 418").

In regard to claim 14

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The method as claimed in claim 11, wherein the electrical unit is an actuator (MC1 and MC2, figure 2).

In regard to claim 15

The method as claimed in claim 11, wherein the switch-on and switch-off signals are received on a plurality of channels [noting "START" switch "K5" is received on multiple channels as well as "E-STOP" (ie. K1, K2, K3, K4), see figure 2].

In regard to claim 17

The method as claimed in claim 11, wherein the predeterminable period of time for switching on the electrical unit corresponds to at least one of the activation time of the electrical unit and a further protective device (noting that the predetermined time (cycle) relates the activation time of the electrical unit since the cycle starts the activation of the electrical unit at that time).

In regard to claim 18

A method for safety-related switching of a plurality of protective devices (switch of MC1 and switch of MC2) connected in cascade fashion (see figure 2), a second of the plurality of protective devices being connected with the aid of a first of the plurality of protective devices in accordance with the method as claimed in claim 11.

In regard to claim 19

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The method as claimed in claim 18, wherein the switch-on signal makes all of the plurality of protective devices available simultaneously (energizing both MC1 and MC2 simultaneously, see paragraph 55).

In regard to claim 22

The protective device as claimed in claim 1, wherein the electrical unit is a contactor (contacts of MC1 and MC2).

In regard to claim 23

A protective device for safety-related switching of an electrical unit, comprising: means for receiving a switch-off signal (see paragraph 17); means for switching the electrical unit off (read on by the signal produced by "E-STOP" switch, see figure 4); means for receiving a switch-on signal (via "START" switch connection means) in the form of a switch-on pulse; and means for switching the electrical unit on ("START" switch via means K5), the electrical unit being switchable on for a predeterminable period of time after reception of the switch-on pulse (see paragraph 75 wherein Lazzaro teaches "but when the start switch contacts stick, the motor will be shut down within one cycle due to contact K5 within a safety relay loop remaining open, due to prolonged energization of coil K5"), wherein the means for switching the electrical unit on includes a timing element (K5) which provides an acknowledgment command for maintaining an on state for a predetained time after the reception of the switch-on pulse.

In regard to claims 24 and 25

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The protective device as claimed in claim 23, wherein the electrical unit is a contactor (contacts of MC1 and MC2).

Allowable Subject Matter

Claims 1-20 are allowed as indicated in the previous office action.

Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The closest prior art of Clement et al. (US 2002/0175568) teaches a protective device for the safety-related shutdown of an electrical unit comprising an evaluation unit wherein the edges of the switch-on pulse are evaluated in order to start the predetermined period however there is a lack of motivation to combine the teachings of Clement et al. with the particular relay based protective device of Lazzaro.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Cavallari whose telephone number is 571-272-8541. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571)272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel Cavallari/

December 17, 2008

/Albert W Paladini/

Primary Examiner, Art Unit 2836

1/8/09